

ABSTRACT OF THE DISCLOSURE

A storage apparatus is operable as primary in a remote copy pair and comprises a remote copy component operable to establish a remote copy relationship between said primary and a secondary; a copy component operable at the primary to create a copy for download onto a portable physical storage medium for offline transport to the secondary for upload; a synchronization component for synchronizing data at said secondary with data at said primary using an online link in response to a request for synchronization from the secondary; a metadata component operable to store a dirty state indicator of a portion of a storage space at the primary after establishment of the remote copy relationship at the primary; and the metadata component being operable to limit synchronization at the secondary to the portion of storage having a dirty state indicator at the primary.